Robot Inspection Checklist

Team Number: 310 Robot Inspection Status (circle): **PASS / FAIL**

Team	Insp.	Robot Size Inspection	Rule #
✓	✓	Robot is presented at inspection with all mechanisms (including all components of each mechanism), configurations, and decorations that will be used on the Robot.	<I06>
✓	✓	Separately test the Robot in all of its unique starting (pre-match setup) configurations. The Robot fits within the Sizing Tool without exerting undue force on the Sizing Tool sides and top.	<I06>a <RG02>
✓	✓	Robot Motion Warning Label is attached if servo motors move during the Robot initialization.	<RG02>
✓	✓	**General Robot Rules**	**Rule #**
✓	✓	Robot does not contain any components that could damage the Playing Field or other Robots.	<RG01>a&b
✓	✓	Robot does not contain materials that are hazardous.	<RG01>c
✓	✓	Robot poses no obvious unnecessary risk of entanglement.	<RG01>d
✓	✓	Robot does not contain sharp edges or corners.	<RG01>e
✓	✓	Robot does not contain animal-based, liquid, or gel materials.	<RG01>f&g
✓	✓	Robot does not contain materials that would cause a delay of game if released.	<RG01>h
✓	✓	Robot does not contain elements that electrically ground the Robot frame to the Playing Field.	<RG01>i
✓	✓	Robot does not contain closed gas, hydraulic, or vacuum based devices.	<RG01>j,k&l
✓	✓	Team number is visible from at least 2 opposite sides and meets requirements.	<RG04>
✓	✓	Alliance Markers are present and meet requirements.	<RG05>
✓	✓	Energy used by the Robot shall come only from approved sources.	<RG06>
✓	✓	Robot is not capable of detaching its own components.	<RG07>
✓	✓	**Robot Mechanical Parts and Materials Rules**	**Rule #**
✓	✓	All components on the Robot are from allowable raw materials and Commercial Off The Shelf products.	<RM01> <RM02> <RM06>
✓	✓	**Robot Electrical Parts and Materials Rules**	**Rule #**
✓	✓	Exactly one Main Power Switch is installed properly, labeled, readily accessible, and visible. The TETRIX, REV, and MATRIX switches are the only allowed Main Power Switch.	<RE01>
✓	✓	All batteries are securely attached to the Robot in a location where they will not make direct contact with other Robots or the Playing Field.	<RE02>
✓	✓	Exactly one (1) Robot Main Battery Pack of an approved type is on the Robot and it is properly connected to the Main Power Switch and either the REV Expansion Hub or REV Control Hub.	<RE03> <RE05>a(i&ii)
✓	✓	Where present, fuses must not be replaced with fuses of higher rating than originally installed or according to manufacturer's specifications. Fuses are single use only.	<RE04>
✓	✓	Allowed electronic devices are powered by power ports on the REV Expansion Hub or REV Control Hub except as noted in <RE05>, <RE13>, and <RE14>.	<RE05>a
✓	✓	The REV Expansion Hub and/or REV Control Hub is powered by the Robot main battery.	<RE05>a(i&ii)
✓	✓	REV SPARK Mini Motor Controllers and REV Servo Power Modules are powered by the Robot main battery or a REV Control or Expansion Hub XT30 port.	<RE05>a(ii)
✓	✓	Allowed sensors only receive power from the REV Expansion Hub or REV Control Hub.	<RE05>a(iii)
✓	✓	Light sources (including LEDs) are not focused or directed in any way, except for the REV Robotics 2m Distance Sensor. Light sources are powered by allowed methods.	<RE05>a(iv) <RE13>
✓	✓	Video recording devices, if used, are powered by an internal battery and their wireless communication capability is turned off.	<RE05>a(v) <RE14>
✓	✓	The smartphone Robot Controller Android device (if used) is powered by its internal battery or by the built-in charging feature of the REV Expansion Hub.	<RE05>b

		Exactly one Robot Controller (a) smartphone Android Device + REV Expansion Hub or b) REV Control Hub) is required. One additional REV Expansion Hub is allowed.	<RE06> <RE08>
		The only allowed Motor and Servo Controllers are: REV Expansion Hub, REV Control Hub, REV Servo Power Module, REV Spark Mini Motor Controller, and VEX Motor Controller 29.	<RE09>
		Robot contains no more than eight (8) DC motors of the allowed models.	<RE10>
		Robot contains no more than twelve (12) servos. They must be compatible with the attached REV Expansion Hub, REV Control Hub, REV Servo Power Module, or VEX Motor Controller 29 and not exceed the manufacturer specifications for the controller.	<RE11>
		Robot contains only allowed sensors and they are connected only to the REV Expansion Hub or the REV Control Hub.	<RE12>
		Power and motor control wires have consistent color coding with different colors used for the positive (red, white, brown, or black with a stripe) and Negative/Common (black or blue) wires.	<RE15>f
		Power, motor control, servo and sensor wires are the correct size.	<RE15>i
		If electronics are grounded to the *Robot* frame, the only approved method is the REV Robotics Resistive Grounding Strap. If needed, the REV Robotics Anderson Powerpole to XT30 adapter may connect to the Resistive Grounding Strap. No other grounding straps or cables are allowed.	<RE15>k
		Approved electrical and electronic devices may be modified to make them more usable; they may not be modified internally or in any way that affects their safety.	<RE16>
✓	✓	**Wheel/Tread Playing Field Damage Test - Optional**	**Rule #**
		Robot did not damage the Playing Field tile. [This is an optional test that is performed only when an Inspector believes that the drivetrain tread may damage a Playing Field tile.]	<I07>
✓	✓	**Team Scoring Element (TSE) Inspection**	**Rule #**
		Teams must present all of their Alliance specific TSEs for inspection. The predominant color of the TSE must match the *Team's* assigned Alliance for the Match (red or blue).	<TE01>
		The TSE satisfies the Robot Mechanical Parts and Materials Rules in section 7.3.2.	<TE02>
		Max. size of the TSE is 4 inches (10.16 cm) by 4 inches (10.16 cm) by 4 inches (10.16 cm). The min. size of the TSE is 3 inches (7.62 cm) by 3 inches (7.62 cm) by 3 inches (7.62 cm).	<TE03>
		The Team Scoring Element is labeled with their Team number (numerals only).	<TE04>
		The TSE does not contain electronics, or any other part or material that violates Robot construction rules outlined in section 7.3.	<TE05>
		The TSE does not use or resemble any current season's COTS scoring elements.	<TE06>
✓	✓	**Signal Sleeve Inspection**	**Rule #**
		The *FIRST* designed Template was used to create the Signal Sleeve(s).	<SS01>
		Images on the Signal Sleeve(s) do not resemble current season's tournament supplied images and they are completely within the designated areas.	<SS02>
		Signal Sleeve(s) must include the Team number in the three designated locations and the numbers must be legible when viewed from a distance of 12 inches (30.48 cm) away.	<SS03>
		Signal Sleeves are constructed only of allowed materials, all images and team number are printed (there are no added items after it was printed), and the connecting ends are joined together only using tape or adhesive.	<SS04>

General Comment(s) or Reason(s) for Failure (if any):

Stuy Fission

Robot Inspector